

## DOCUMENT RESUME

ED 080 829

CE 000 042

AUTHOR Senters, Jo; Cohen, Lynn  
TITLE Report on Chiropractors Licensed in Washington;  
Information on Education and Training Programs.  
INSTITUTION Washington State Dept. of Social and Health Services,  
Olympia. Health Manpower Project.  
PUB DATE Jun 70  
NOTE 28p.

EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*Health Occupations; \*Individual Characteristics;  
Manpower Utilization; Occupational Mobility;  
\*Occupational Surveys; State Surveys  
IDENTIFIERS \*Washington State

## ABSTRACT

The purpose of this study was to determine profile characteristics of chiropractors licensed in the state of Washington. The results are based upon information gathered through a questionnaire which was sent to all chiropractors licensed in the state as of March 30, 1970. The response rate to the questionnaire was 83 0/0. The findings were that a professional chiropractor was most likely to be in practice in King County, had not been employed full-time in an occupation previous to chiropractic, and was engaged in direct patient care and administration work from 30 to 39 hours a week. Other typical background characteristics were that he was of male sex, was under 45, had obtained his license through reciprocity in another state, had participated in one or more short-term courses or workshops, and had taken no academic coursework as part of his continuing education. (Tables and references are included.) (KP)

FILMED FROM BEST AVAILABLE CO



U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

# Chiropractors Licensed in Washington

JUNE, 1970

STATE OF WASHINGTON  
**DEPARTMENT OF HEALTH**

DANIEL J. EVANS  
GOVERNOR  
WALLACE LANE, M.D., M.P.H.  
DIRECTOR

ED 080829

Y  
Y  
Y  
Y

Handwritten scribbles and the text "CE doc 047" written vertically.

ED 080829

REPORT ON CHIROPRACTORS LICENSED IN WASHINGTON

BY

JO SENTERS, M.A.  
Research Analyst  
Health Manpower Project

Information on Education and Training  
Programs Compiled by

Lynn Cohen, M.Ed.  
Research Analyst  
Health Manpower Project

All inquiries concerning the report and requests for data should be addressed to the Health Manpower Project, Washington State Department of Health, 815, Smith Tower, Seattle, Washington 98104. Data were gathered in cooperation with the Division of Professional Licensing. The Survey is considered a Pilot Study. Modifications in design and analyses are anticipated for future studies.

ADVISORY COUNCIL TO THE HEALTH MANPOWER PROJECT

Miss Dorothy Asplund Program Specialist	Division of Vocational Education Health Occupations Section
Frank Baker, Director	Division of Comprehensive Health Planning Planning and Community Affairs Agency
John Bigelow, Executive Director	Washington State Hospital Association
Max Brokaw, Administrator	Division of Professional Licensing Department of Motor Vehicles
Elizabeth L. Byerly, Ph.D. Coordinator for Clinical Facilities	School of Nursing University of Washington
George A. Forsyth Executive Director	Washington State Health Facilities Association
*Richard Gorman, Executive Secretary	Washington State Medical Association
Miss Merriam Lathrop Assistant Executive Director	Washington State Nurses' Association
Henry Mudge-Lisk, Director	Puget Sound Comprehensive Health Planning Board
Henry Polis, Vocational Education Program Director	State Board for Community College Education
William O. Robertson, M.D. Associate Dean	School of Medicine University of Washington
Lawrence J. Sharp, Ph.D. Associate Director Development Programs	Washington/Alaska Regional Medical Program
Lyle M. Tinker, Chairman Manpower Coordinating Committee	Employment Security Department
Robert P. Thomas Executive Director	Regional Health Planning Council
Vern Vixie	Washington State Dental Association

\*Chairman of the Health Manpower Advisory Council

SURVEY OF CHIROPRACTORS LICENSED IN WASHINGTON STATE

Wallace Lane, M.D., M.P.H., Director  
Washington State Department of Health

Jack G. Nelson, Director  
Division of Professional Licensing

Jess B. Spielholz, M.D., M.P.H.  
Deputy Director  
Office of Health Services

Max Brokaw, Administrator  
Division of Professional Licensing

Staff and Consultants

State Department of Health:

Division of Professional Licensing:

Ilse J. Volinn, Ph.D.  
Project Director  
Health Manpower Project

Joanne Redmond, Clerical Supervisor

Jo Senters, M.A., Research Analyst  
Health Manpower Project

Lynn Cohen, M.Ed., Research Analyst  
Health Manpower Project

Margaret Kroshus, Secretary  
Health Manpower Project

Jean Hyles  
Clerical Assistant  
Division of Health Services

Thomas W. Steinburn, Ph.D.  
Department of Sociology  
University of Washington  
Data Analysis Consultant

Gilbert Scott, Keypuncher  
Computer Center  
University of Washington

## TABLE OF CONTENTS

	<u>Page Number</u>
The Chiropractic Profession	i
Chiropractic Education	ii
Methodology of the Study	iii
Summary of the Report	iv
INTRODUCTION	1
GEOGRAPHIC DISTRIBUTION:	1
State of Residence	1
CHIROPRACTORS LIVING IN WASHINGTON:	2
Practice by County	2
EMPLOYMENT CHARACTERISTICS:	4
Employment Status	4
Age and Type of Practice	4
Previous Full-time Employment in Another Occupation	5
Work Functions	5
Relation of Education and Type of Practice to Work Functions	6
Hours Worked in a Typical Week	6
Hours per Week and Type of Practice	7
BACKGROUND CHARACTERISTICS:	7
Age	7
Sex Composition	9
Chiropractic Degree	9
Year Chiropractic Degree Granted	9
State in Which Chiropractic Degree Granted	9
College Preparation	9
Age and College Preparation	10
Degrees in Addition to the Chiropractic Degree	10
Continuing Professional Education	11
Participation in Continuing Education and Type of Practice	11
Licensure	11
Licensure and Age	12
State From Which Reciprocity Granted	12
Number of Other States in Which Licensed	13
Appendix	
Selected Data Tables	
References	

LIST OF TABLES

Table Number		Page
I	State of Residence of Chiropractors Licensed in Washington	1
II	Number of Years of College Reported	10
III	Degree in Addition to the Chiropractic	10
IV	Extent of Participation in Academic Courses and in Short-term Courses and Workshops	11

## LIST OF FIGURES

<u>Figure Number</u>		<u>Page</u>
1	Professional Location of Chiropractors Licensed and Living in Washington, by County	3
2	Employment Status of Licensed Chiropractors Living in Washington	4
3	Work Functions Engaged In at Least Part Of The Time	5
4	Major Work Function	6
5	Number of Hours Worked in a Typical Week Among Chiropractors Licensed & Living in Washington	7
6	Age Distribution of Chiropractors Licensed in and Living in Washington	8
7	Percent Licensed Through Reciprocity, by Age	12

## THE CHIROPRACTIC PROFESSION

Chiropractic is now the largest non-drug medical profession in the world (reference 5, page 3). The International Chiropractors Association defines the profession as follows:

"The Science of Chiropractic deals with the relationships between the articulations of the vertebral column and the nervous system, and the role of these relationships in the restoration and maintenance of health.

"The Philosophy of Chiropractic is based upon the premise that disease or abnormal function is caused by interference with nerve transmission and expression, due to pressure, strain or tension upon the spinal cord or spinal nerves, as a result of bony segments of the vertebral column deviating from their normal juxtaposition.

"The Practice of Chiropractic consists of analysis of any interference with normal nerve transmission and expression, and the correction thereof by an adjustment, with the hands, of the abnormal deviations of the bony articulations of the vertebral column for the restoration and maintenance of health, without the use of drugs or surgery. The term 'analysis' is construed to include the use of x-ray and other analytical instruments generally used in the practice of Chiropractic."

## CHIROPRACTIC EDUCATION

California is the only state on the West Coast which has chiropractic schools. There are two: Chiropractic College of Los Angeles in Glendale, and Cleveland Chiropractic College in Los Angeles.

Academic requirements for entry into the Chiropractic College of Los Angeles are two years of college coursework from any accredited college or university. The program of study lasts 36 consecutive months. The Doctor of Chiropractic degree is granted at the completion of the program. (see reference 6).

This college also offers the Bachelor of Arts degree in Biology, and a certificate in Radiologic Technology (two year program). The college is approved by the Council on Chiropractic Education of the American Chiropractic Association. The California Department of Education and the Veterans Administration both approve the college. (see reference 6).

In May, 1970, 60 students were graduated from the Chiropractic College of Los Angeles; their total enrollment is 200.

The Cleveland Chiropractic College's requirements for acceptance are a high school diploma, or its equivalent, and a personal interview. The length of the program is 4 academic years (9 months each), or 36 consecutive months (accelerated program). This school is accredited by the International Chiropractic Association, and is approved by the California Department of Education and by the Veterans Administration. (see reference 5)

Cleveland Chiropractic College grants the Doctor of Chiropractic degree to its graduates. Forty students graduated in Spring, 1970, and the total enrollment is 150. Cleveland Chiropractic College also offers an Office Assistant or X-ray Technician course (8 month program). (see reference 5)

## Methodology of the Study

Method and Response Rate: This report is based on information gathered through the Department of Motor Vehicles, Division of Professional Licensing, State of Washington, at the time of license renewals.

Analysis of data obtained through this survey was performed by the staff of the Health Manpower Project, Washington State Department of Health.

On July 14, 1969, 387 research forms were mailed with license renewals to all chiropractors licensed in the state of Washington. By March 30, 1970, 386 chiropractors had renewed their licenses for 1969-70. Three hundred and twenty one also returned their research forms with their license renewals. This represents a return of 83% of all chiropractors licensed by that date.

Restrictions on the Data: The survey upon which this report is based is considered a pilot study. Modifications in the questionnaire have been made for the 1970-71 survey of chiropractors licensed in Washington state. The figures in this report may be considered as representative for the counties and the state. Specific restrictions on the data will be stated.

## SUMMARY

This report is based on information gathered at the time of license renewals through the Division of Professional Licensing, Olympia, Washington. 83% of all chiropractors licensed as of March 30, 1970 returned their research questionnaires with their renewals.

Over three-fourths (82%) of the chiropractors licensed in Washington lived in the state. A profile of the "typical" chiropractor licensed in and living in Washington can be constructed. This professional is most likely to:

- be in solo practice in King County,
- have not been employed full-time in an occupation previous to chiropractic,
- engage in direct patient care and administration work 30 to 39 hours in a typical week,

and

- be of the male sex and under the age of 45,
- have obtained a Doctor of Chiropractic degree from an Iowan chiropractic institution,
- have reported at least one year of college in addition to his chiropractic training,
- have reported no academic degree in addition to his chiropractic degree
- have reported taking no academic coursework as part of his continuing education,
- have reported participating in one or more short-term courses or workshops,
- have obtained his license through reciprocity with another state.

This survey upon which this report was based is considered a pilot study. A survey of chiropractors licensed in Washington for 1970-71 is currently underway.

## INTRODUCTION

This report will begin with an examination of the states of residence of chiropractors licensed in Washington. Discussion will then focus on only those chiropractors who were residents of Washington, since they constitute the basis of the state's actual supply of chiropractic manpower.

Additional details to the discussion may be found in the selected data tables, Appendix B.

## Geographic Distribution

State of Residence. Over three fourths (82%) of the chiropractors licensed in Washington lived in the state. The remaining 17% reported residence in a variety of states with the most frequently mentioned being Oregon (11 chiropractors or 4%).

TABLE I.

State of Residence of Chiropractors  
Licensed in Washington

	No.	%
Washington	264	82%
Oregon	11	4%
Iowa	7	2%
All Others (15 other States mentioned)	28	9%
No Answer	<u>11</u>	<u>3%</u>
	321	100%

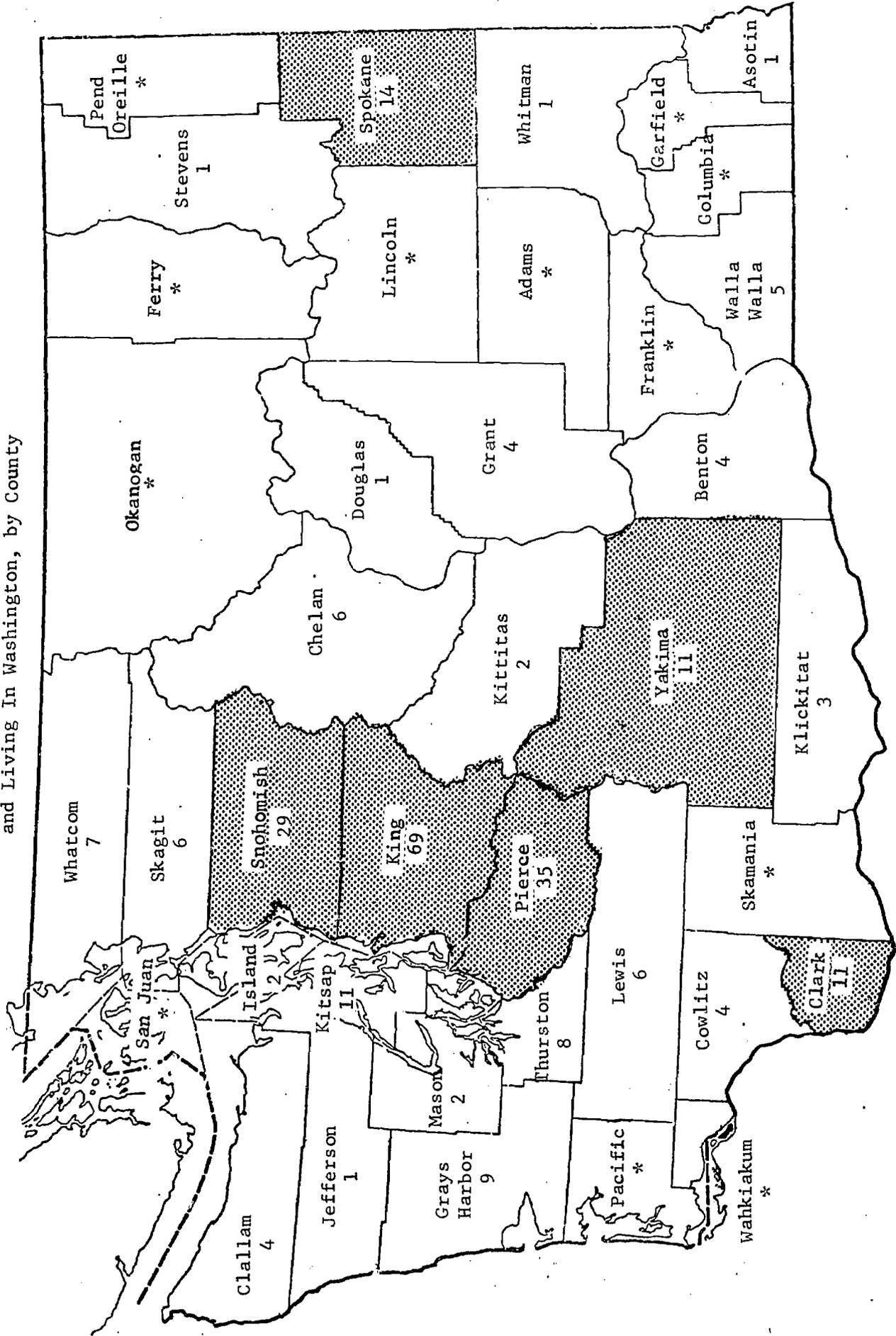
## CHIROPRACTORS LIVING IN WASHINGTON

Practice by County. The majority (61%) of the chiropractors reported professional addresses in the five most populous counties in Washington (King, Pierce, Snohomish, Spokane and Yakima). The data indicate no chiropractors were professionally located in 11 counties. Overall, however, professional location was more rural than that found in some other health occupations for which current data are available. Survey data on podiatrists indicated 81% lived in the five above-named urban counties and no podiatrists were located in 21 counties. (Reference 2) Physicians were even more densely located in the state--80% resided in the five counties, although at least one physician was living in every Washington county. (reference 3) On the other hand, 57% of the veterinarians, professionals important to public health, were residing in the five urban counties. The survey data indicated no veterinarians were residing in only four counties. (reference 4)

The professional location of the chiropractors is shown in Figure 1. The map does not necessarily reflect the location of chiropractic services, but only each chiropractor's reported professional address.

Figure 1

Professional Location of Chiropractors Licensed and Living in Washington, by County



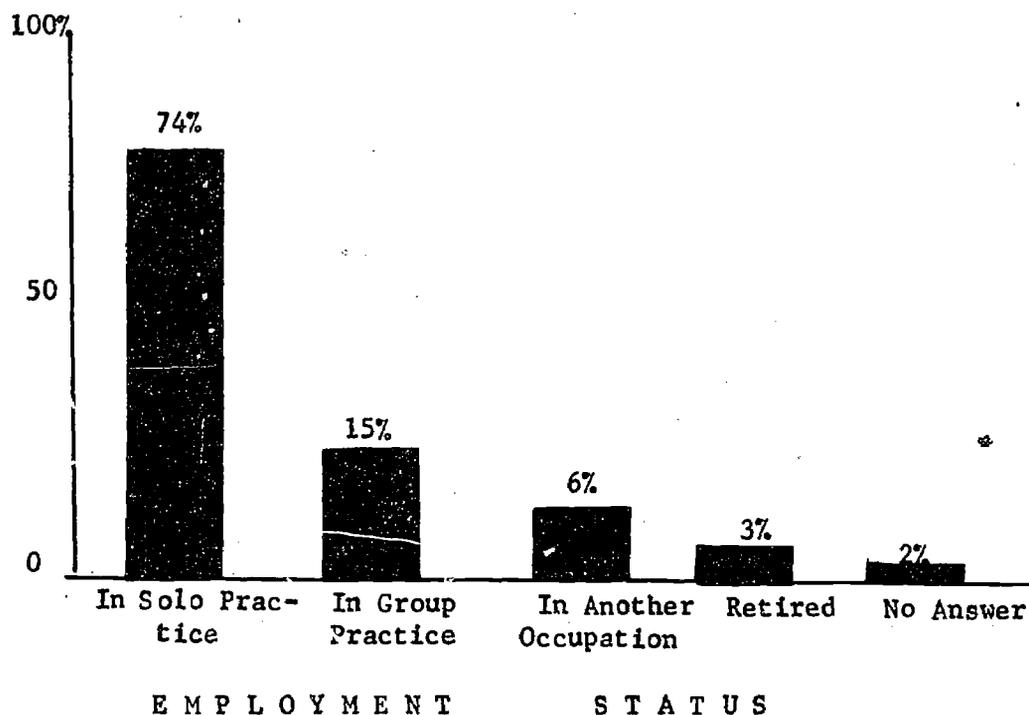
\* The data indicate no chiropractors were professionally located in this county.

Counties of greatest concentration of chiropractic manpower.

## Employment Characteristics

Employment Status. Seventy four percent of the respondents living in Washington were employed in solo chiropractic practice and 15% in group practice. Three percent were retired and 7% were working in such other occupations as post office employee and printer-publisher. A few respondents failed to answer the question.

Figure 2  
Employment Status of Licensed Chiropractors  
Living in Washington



Age and Type of Practice. A general pattern was found regarding age and type of practice. With increasing age, chiropractors were more often found to be engaged in solo rather than group practice. Fifty nine percent of those under the age of 35 and 84% of the chiropractors

between the ages of 45 and 54 were engaged in solo practice. (See Table I, Appendix B for additional detail.)

Previous Full-time Employment in Another Occupation. Forty five percent of the respondents specified that they had been employed full-time in another occupation, excluding summer or temporary work. Fifty six percent reported they had not, and 1% failed to answer this question.

Younger chiropractors (under age 35) were most likely to specify that they had not been previously employed in another occupation. The data do not indicate whether the younger recruits to the profession are simply beginning their chiropractic career earlier than their older counterparts, or if working in another occupation characteristically occurs later in the chiropractic career.

Work Functions. Respondents were asked to specify any of several work functions in which they engaged. Most of the chiropractors checked several. When asked to specify their major work function, however, 89% indicated it was direct patient care. This is shown in Figures 3 and 4.

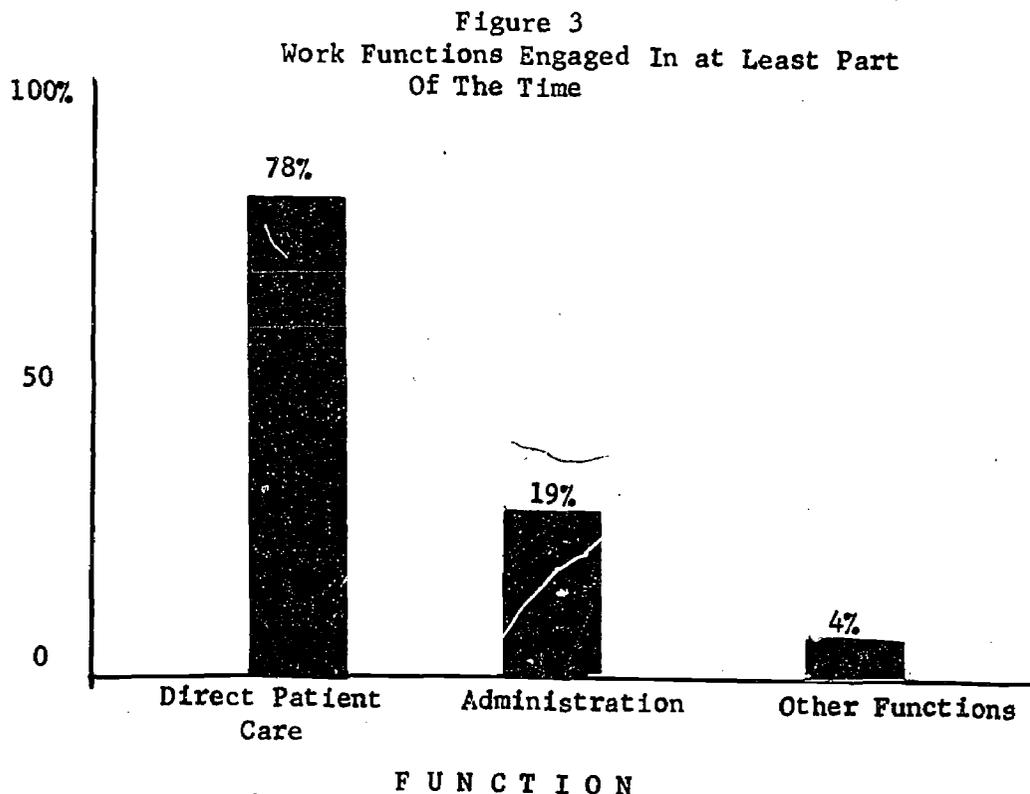
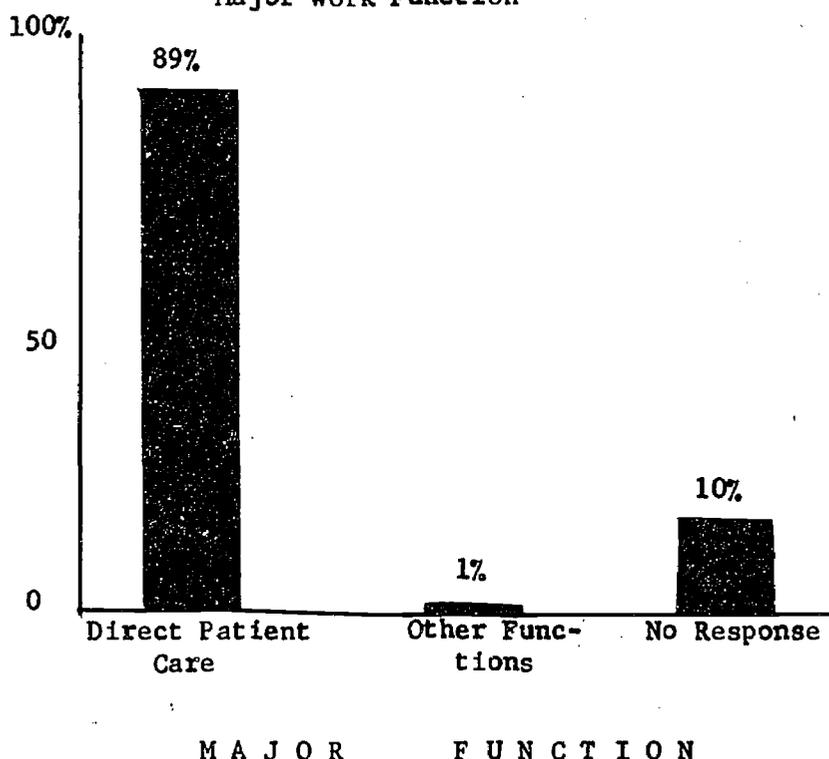


Figure 4  
Major Work Function



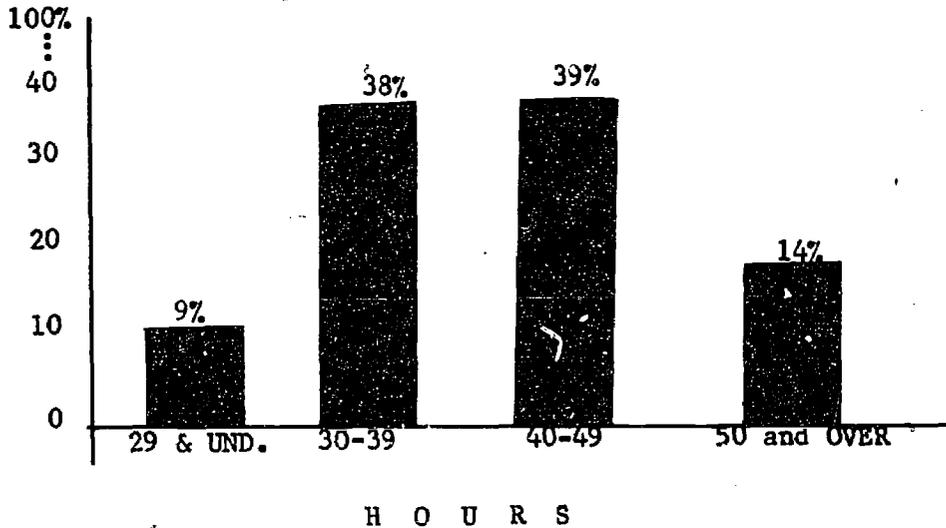
Relation of Education and Type of Practice to Work Functions.

No significant differences in work functions were found when educational background was considered. Chiropractors with simply a professional chiropractic degree and no college were about as likely as those with the chiropractic degree and a baccalaureate or higher degree to engage in the various work activities.

A difference was found in the percentage engaging in administration, however, when the type of practice was considered. Solo practitioners were most likely to report that they engaged in administration--24% of the chiropractors in solo practice and only 5% in group practice reported spending some time in administration.

Hours Worked in a Typical Week. Slightly over a third of the chiropractors worked 30 to 39 hours in a typical week, and another third 40 to 49 hours. Distribution of replies regarding the length of the typical work week can be seen in Figure 5.

Figure 5  
 Number of Hours Worked in a Typical Week Among  
 Chiropractors Licensed & Living in Washington

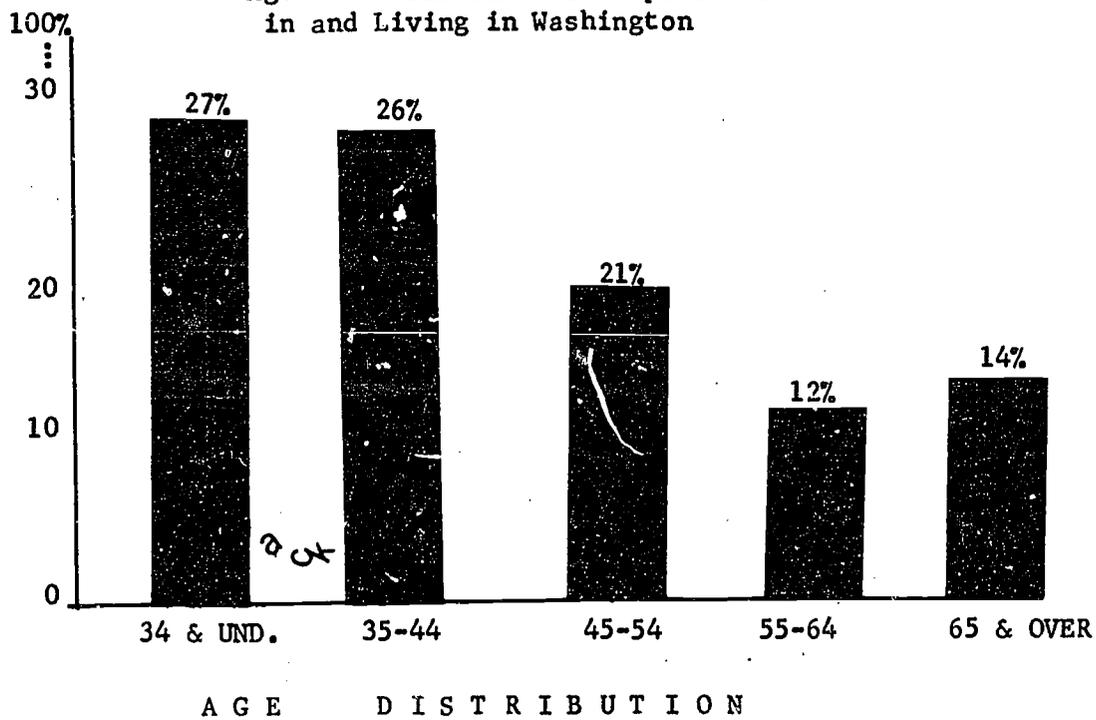


Hours per Week and Type of Practice. The relationship of hours worked in a typical week and the type of practice was considered. Group practitioners were more often working 30 to 39 hours per week than the solo practitioners, who frequently reported 40 to 49 hours per week. Forty five percent of the group practitioners and 34% of the solo practitioners worked 30 to 39 hours in a typical work week.

## BACKGROUND CHARACTERISTICS

Age. Slightly over one half of the chiropractors were under age 45. Greater detail can be found in Figure 6.

Figure 6  
Age Distribution of Chiropractors Licensed  
in and Living in Washington



Sex Composition. Eight percent (21) of the chiropractors living in Washington were women. Female chiropractors were similar to the males in their employment characteristics, although they were slightly more likely to be out of the work force.

Chiropractic Degree. Eighty eight percent of the chiropractors reported their chiropractic degree as Doctor of Chiropractic, 5% as Doctor of Naturapathic Medicine, and 7% failed to specify their degree.

Year Chiropractic Degree Granted. About a third of the professional degrees were granted during each of the following time spans: before 1950; 1950 to 1959; and 1960 to 1968.

State in Which Chiropractic Degree Granted. Over half (58%) of the professional degrees were granted from Iowan chiropractic institutions. The next most frequently reported states of training were Missouri (8%) and Washington (7%).<sup>1</sup> The remaining chiropractors specified many other west and midwestern states as the location of their training (Table II, Appendix B).

College Preparation. Fifty one percent (132) of the chiropractors reported one or more years of college outside of their chiropractic education. More respondents reported two years of college than any other number of years. This can be seen in Table II.

1

As of 1969 there were no chiropractic educational institutions in Washington State.

TABLE II.

## Number of Years of College Reported

Years	No.	%
One	30	23%
Two	53	40%
Three	16	12%
Four	30	23%
Five or More	3	2%
	<u>132*</u>	<u>100%</u>

\*The chiropractors were requested to specify number of years of college only if they had attended one year or more. 127 (49%) of all the chiropractors did not specify any years of college.

Age and College Preparation. With increasing age, the percentage failing to indicate any years of college preparation, outside their chiropractic training, also increased. Thirty seven percent of the chiropractors under the age of 35 and 57% of those age 55 to 64, for example, failed to specify any years of college. (See Table II, Appendix B for additional detail).

Degrees in Addition to the Chiropractic Degree. Sixteen percent (41) of the chiropractors specified an educational degree outside their chiropractic education. These ranged from the Associate of Arts Degree to the Master of Arts.

TABLE III.

## Degree in Addition to the Chiropractic

Degree:	No.	%
None Specified	218	84%
A.A.	9	4%
B.S./B.A.	20	8%
M.A.	3	1%
Other Degrees	9	3%
	<u>259</u>	<u>100%</u>

Continuing Professional Education. The respondents were asked to specify how many academic courses they had taken during the last five years. Fifty six percent reported one or more such courses. The chiropractors were also asked to specify the number of short-term courses or workshops in which they had participated during the same time period. Ninety percent reported participating in one or more such courses or workshops. This can be seen in greater detail below.

TABLE IV.

Extent of Participation in Academic Courses and in Short-term Courses and Workshops

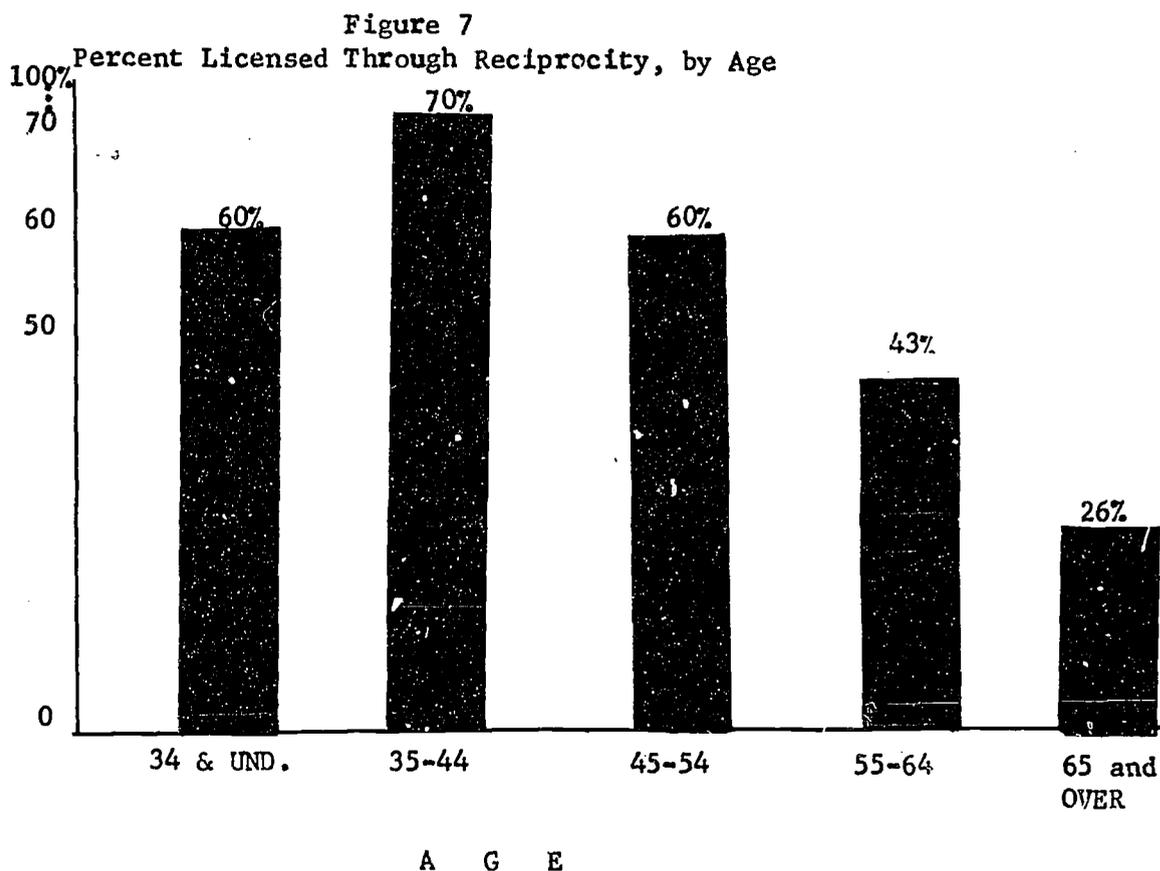
Number of Courses Taken:	Academic Courses		Short-term and/or Workshops	
	No.	%	No.	%
None	66	26	18	7
One to Three	62	24	65	25
Four or More	83	32	168	65
No Answer	48	18	8	3
	<u>259</u>	<u>100%</u>	<u>259</u>	<u>100%</u>

Participation in Continuing Education and Type of Practice.

There were no differences in the extent of short-term courses and workshop participation, when type of practice was considered. Group practitioners were slightly more likely to report more participation in academic coursework; however, the differences were small.

Licensure. Slightly over half of the chiropractors (55%) obtained their licenses through reciprocity with other states. Forty four percent obtained their licenses through examination, and 1% failed to answer this question.

Licensure and Age. Younger chiropractors were more often licensed through reciprocity than their older counterparts. Seventy percent of those between the ages of 35 and 44, for example, were licensed through reciprocity, compared to 26% of those over the age of 64.



State from Which Reciprocity Granted. If a respondent specified Washington licensure through reciprocity, he was asked to name the state involved. The most frequently mentioned states were Alaska (5%),

Iowa (17%) and Utah (6%). The other states reported were not in one region, but scattered throughout the United States.

Number of Other States in Which Licensed. Not quite half (49%) of the chiropractors were currently licensed in at least one state other than Washington. Of those who reported licensure outside Washington, 80% were licensed in only one other state. A wide variety of other states were reported, with the most frequently mentioned being Iowa (30 or 24% of those licensed in another state) and Kentucky (14 or 11%).

This concludes the report on chiropractors licensed in Washington for the year 1969-70. A survey of chiropractors licensed in Washington for 1970-71 currently underway will provide verification and elaboration of the data discussed in this report.

TABLE I.

EMPLOYMENT STATUS BY AGE

Employment Status:	34 and under		35-44		45-54		55-64		64+		No Answer	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Solo Practice	41	59	52	79	46	84	26	87	24	68	2	67
Group Practice	23	33	9	14	3	5	1	3	2	6	0	0
Retired	0	0	0	0	0	0	2	7	6	17	0	0
Other Occupation	5	7	5	7	4	7	1	3	2	6	0	0
No Answer	1	1	0	0	2	4	0	0	1	3	1	33
<b>Total</b>	<b>70</b>	<b>100%</b>	<b>66</b>	<b>100%</b>	<b>55</b>	<b>100%</b>	<b>30</b>	<b>100%</b>	<b>35</b>	<b>100%</b>	<b>3</b>	<b>100%</b>

**APPENDIX**

TABLE II.

STATE IN WHICH CHIROPRACTIC DEGREE GRANTED

State	No.	%
Washington	18	7
California	5	2
Oregon	13	5
Colorado	1	0
Illinois	10	4
Indiana	4	2
Iowa	151	58
Kansas	1	0
Minnesota	7	3
Missouri	20	8
Texas	1	0
Not Specified	<u>28</u>	<u>11</u>
Total	259	100%

#### REFERENCES

1. Health Resources Statistics, 1968. U.S. Department of Health, Education and Welfare, Public Health Service, Health Services and Mental Health Administration
2. Podiatrists Licensed in Washington, May, 1970. Health Manpower Project, Washington State Department of Health
3. Physician data supplied by the Washington State Medical Education and Research Foundation, June 4, 1970, Seattle, Washington.
4. Veterinarians Licensed in Washington, March, 1970. Health Manpower Project, Washington State Department of Health
5. Bulletin of the Cleveland Chiropractic College: 3511 West Olympic Boulevard, Los Angeles, California 90019 (not dated).
6. Bulletin of Los Angeles College of Chiropractic for the Academic Year 1969-71. Volume 54, Number 1, Glendale, California